

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington. DC 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR R 10918HORNEY DOCKET NO.

LM02/0928

THOMASON AND MOSER THE GALLERIA 2-40 BRIDGE AVENUE PO BOX 8160 RED BANK NJ 07701 LUU, M EXAMINER

ART UNIT PAPER NUMBER

09/28/98 DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	ication No. Applicant(s)		
	08/447,717	STEWART		
	Examiner	Group Art Unit		
	LUU	2775	16	
The MAILING DATE of this communication appear	s on the cover sheet b	eneath the correspondence ac	idress	
Period for Response			C .	
A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SI MAILING DATE OF THIS COMMUNICATION.	ET TO EXPIRE THR	MONTH(S) FROM THE		
 Extensions of time may be available under the provisions of 37 CFR 1 from the mailing date of this communication. If the period for response specified above is less than thirty (30) days, If NO period for response is specified above, such period shall, by defative to respond within the set or extended period for response will, the set or extended period for response will, the set or extended period for response will be set or extended period for respo	a response within the statuto ault, expire SIX (6) MONTHS	ory minimum of thirty (30) days will be o	considered timely.	
Status				
A Responsive to communication(s) filed on July	43, 1998)			
This action is FINAL.			 ,	
☐ Since this application is in condition for allowance except accordance with the practice under <i>Ex parte Quayle</i> , 1935			sed in	
Disposition of Claims				
A Claim(s) 1-16; 18-20, 22-25 and 27-31		is/are pending in the appl	is/are pending in the application. is/are withdrawn from consideration.	
Of the above claim(s)		is/are withdrawn from cor		
A Claim(s) 1-7 and 30-31		is/are allowed.		
\$ Claim(s) 8-16, 18-20, 22-25 and 27-29		is/are rejected.	is/are rejected.	
□ Claim(s)				
□ Claim(s)		are subject to restriction or election		
Application Papers		requirement.		
☐ See the attached Notice of Draftsperson's Patent Drawing	Review, PTO-948.			
☐ The proposed drawing correction, filed on	is 🗆 approved	□ disapproved.		
☐ The drawing(s) filed on is/are object	ed to by the Examiner.			
☐ The specification is objected to by the Examiner.				
$\ \square$ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. § 119 (a)-(d)				
☐ Acknowledgment is made of a claim for foreign priority und ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the received.	he priority documents ha	ave been		
 received in Application No. (Series Code/Serial Numbe received in this national stage application from the Intel 				
*Certified copies not received:		•		
Attachment(s)				
☐ Information Disclosure Statement(s), PTO-1449, Paper No.	o(s) 🗆 Ir	☐ Interview Summary, PTO-413		
☐ Notice of References Cited, PTO-892	• •	☐ Notice of Informal Patent Application, PTO-152		
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	3 0	Other		

Office Action Summary

Art Unit: 2775

DETAILED ACTION

Specification

1. The amendment filed January 22, 1998 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The new added Figs. 7 and 8 raise the new issue of new matter since they only added to support the limitations recited in the new independent claims 8, 14, 20, and 30; however, they are not described in the specification, as originally filed, in such a way as to enable one skilled in the art to enable one skilled in the art to which it pertains to fully understand the invention.

Regarding claim 8, lines 13-18, the claimed limitations "storing, during each of said LOAD periods, a data line signal within said circuit; and ... said current and said stored data line signal." were not clearly supported in the specification, as originally filed, in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 9, "said gray scale control signal has a magnitude that is less than said stored data signal"; in claim 10, "a linear ramp waveform over the plurality of ILLUMINATION periods within one frame period"; in claim 11, "a stepped waveform over the plurality of ILLUMINATION periods within one frame period"; in claim 12, "a digital signal containing a

Art Unit: 2775

plurality of bits where each bit is applied to said circuit during a plurality of consecutive LOAD periods"; and in claims 14 and 20, "dividing said frame period into a plurality of LOAD periods and a plurality of ILLUMINATE periods, where each LOAD period is followed by an ILLUMINATE period"; and "during each of said LOAD periods ... data signal is stored; and during each of said ILLUMINATE periods,... electroluminescent cell" were not supported in the specification or the drawings in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 USC § 112

2. Claims 8-16, 18-20, 22-25, and 27-29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Note the objection to new matter added to specification and/or drawing figures as set forth above.

Dependent claims are considered rejected for incorporate the defects from their respective parent claims by dependency.

Art Unit: 2775

Dependent claims are considered rejected for incorporating the defects from their respective parent claims by dependency.

Allowable Subject Matter

3. Claims 1-7 and 30-32 are allowed.

None of the prior art of record teaches or suggests the claimed invention as illustrated in figures 2-3 of the present invention.

Response to Arguments

4. Applicant's arguments with respect to claims 8-16, 18-20, 25, and 27-29, file July 23, 1998 have been considered but are moot in view of the new ground(s) of rejection.

The new added Figs. 7 and 8 raise the new issue of new matter since they only added to support the limitations recited in the new independent claims 8, 14, and 20; however, they are not described in the specification, as originally filed, in such a way as to enable one skilled in the art to enable one skilled in the art to which it pertains to fully understand the invention.

A. Response to the Applicant's arguments with respect to Fig. 7

Figure 7 is merely depicts a plurality of individual different waveforms, and there is no connection between these individual waveforms and how exactly they work together, as recited in claims 8, 14, 20 and 30, as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2775

Applicant also argues, at page 3, third paragraph, that

"On page 3, lines 62-64 the specification states that the "ramp of the voltage" over a frame period can be replaced with "a step function in voltage" over a frame period. This is <u>exactly</u> what is depicted in the third time graph of Fig. 7, a step waveform that generally follows the slope of the ramp waveform."

However, the Examiner has carefully review page 3, lines 62-64, nothing is <u>exactly</u> described as the Applicant's allegation as set forth above, i.e; no where in the specification that describes exactly that "the ramp of the voltage over a frame period can be replaced with a step function in voltage over a frame period".

B. Response to the Applicant's arguments with respect to Fig. 8

Applicant argues at page 4, third paragraph, by asserting that

"On page 4, lines 16-19, the specification states that during the LOAD periods data is loaded into the pixel circuitry based upon the significance of each data bit, i.e. the least significant bit (LSB) is loaded during the first LOAD period, the "next most significant bit" is loaded during the second LOAD period and so on. This bit significant loading is what is depicted in the second (middle) graph of Fig. 8".

However, by looking at Fig. 8, second graph, the Examiner could not tell which pulse is the least significant bit (LSB) and which ones is the most significant bit (MSB).

C. Response to the Applicant's arguments with respect to claim 8

Art Unit: 2775

Regarding claim 8, lines 13-18, the claimed limitations "storing, during each of said LOAD periods, a data line signal within said circuit; and ... said current and said stored data line signal." were not clearly supported in the specification, as originally filed, in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant argues, at page 5, second paragraph, by asserting that "These clause recite exactly the process described in the specification at page 3, lines 58 to page 4, line 2 (analog control) and again at page 4, lines 12-22 (digital control)."

However, after review the pages and lines number as asserted by Applicant, Examiner could not find the exact clause, as alleged by Applicant, to describe the claimed limitation as recited in claim 8 "storing, during each of said LOAD periods, a data line signal within said circuit; and ... said current and said stored data line signal."

Regarding claim 9, "said gray scale control signal has a magnitude that is less than said stored data signal"; in claim 10, "a linear ramp waveform over the plurality of ILLUMINATION periods within one frame period"; in claim 11, "a stepped waveform over the plurality of ILLUMINATION periods within one frame period"; in claim 12, "a digital signal containing a plurality of bits where each bit is applied to said circuit during a plurality of consecutive LOAD periods"; and in claims 14 and 20, "dividing said frame period into a plurality of LOAD periods and a plurality of ILLUMINATE periods, where each LOAD period is followed by an ILLUMINATE period"; and "during each of said LOAD periods ... data signal is stored; and

Art Únit: 2775

during each of said ILLUMINATE periods,... electroluminescent cell" were not supported in the specification and the drawings in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2775

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date

of this final action.

6. Any inquiry concerning this communication should be directed to Matthew Luu at

telephone number (703) 305-4850.

PRIMARY EXAMINER

Mallh Lun

M. Luu: ML

September 14, 1998